

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK**

-----X
LOCUST VALLEY WATER DISTRICT,

Plaintiff,

- v. -

**THE DOW CHEMICAL COMPANY,
FERRO CORPORATION, VULCAN
MATERIALS COMPANY**

Defendants.

OPINION & ORDER

19-cv-2490 (NG) (RLM)

-----X
AND THESE RELATED CASES:

**18-cv-7282, 18-cv-7279, 19-cv-2975,
18-cv-7277, 18-cv-7271, 19-cv-3059,
19-cv-2986, 18-cv-7281, 19-cv-85,
18-cv-7272, 19-cv-1351, 18-cv-7266,
18-cv-7269, 19-cv-3197, 19-cv-3570,
19-cv-2973, 18-cv-7278, 19-cv-2990,
19-cv-2974, 19-cv-1348, 19-cv-1404,
19-cv-5825, 19-cv-05775**

-----X
GERSHON, United States District Judge:

Before the court is a joint motion by the defendants The Dow Chemical Company (“Dow”), Ferro Corporation (“Ferro”), and Vulcan Materials Company (“Vulcan”) to dismiss the complaints in 24 related actions.¹ The actions have been brought under the court’s diversity jurisdiction, 28

¹ In addition to Locust Valley Water District, the other plaintiffs are: Albertson Water District, Carle Place Water District, Franklin Square Water District, Garden City Park Water District, Water Authority of Great Neck North, Greenlawn Water District, Town of Huntington & Dix Hills Water District, Jericho Water District, Board of Commissioners of the Manhasset-Lakeville Water District, Oyster Bay Water District, Plainview Water District, Port Washington Water District, Roslyn Water District, Incorporated Village of Garden City, Incorporated Village of Hempstead, Incorporated Village of Mineola, West Hempstead Water District, Westbury Water & Fire District, Water Authority of Western Nassau, Bethpage Water District, South Farmingdale Water District, South Huntington Water District, and Town of Hempstead.

U.S.C. § 1332, by public water suppliers located on Long Island, New York. Plaintiffs make claims relating to defendants' manufacturing and promoting of 1,4-dioxane ("dioxane") and industrial solvents containing dioxane and principally seek to recover the costs of removing dioxane from their drinking water wells. Each of the complaints raises five claims under New York law, including strict products liability for defective design, strict products liability for failure to warn, negligence, public nuisance, and trespass. Each seeks, among other things, compensatory and punitive damages, injunctive and equitable relief, declaratory relief, and costs and attorneys' fees. Defendants seek dismissal of the complaints in their entirety under Federal Rule of Civil Procedure 12(b)(6) on the basis that plaintiffs have failed to sufficiently allege causation and alternative theories of liability. Defendants do not challenge the allegations of the complaints as to any other elements of the claims. For the reasons set forth below, defendants' motion is denied in full.

I. Factual Allegations

The following facts are drawn from the complaints in these actions and are assumed to be true for the purposes of this motion.

A. General Background

Plaintiffs are public water suppliers that are responsible for providing potable drinking water to the residents of Nassau and Suffolk Counties. Each plaintiff has detected the presence of dioxane in its water supply. Plaintiffs allege that dioxane and products containing dioxane were used and discharged in the vicinity of their drinking water production wells, migrated through the subsurface and into the groundwater, and now contaminate each of their wells.

B. Dioxane

Dioxane is a synthetic industrial chemical that does not occur in nature. It was mainly used in industrial settings as a stabilizer for chlorinated solvents, including methyl chloroform, also known as 1,1,1-trichloroethane (“TCA”), which was used to dissolve greasy and oily substances from machined metal products. TCA was also used as a septic tank and drain cleaner, among other uses. Widespread use of TCA started in the 1950s and ceased in 1996 when it was banned for its role in depleting the ozone layer. Even after 1996, however, TCA was still used under an exemption from the ban for “existing stocks,” and continued to be extensively manufactured in the United States until January 1, 2005.

Dioxane has unique characteristics that lead to extensive and persistent environmental contamination. It is both mobile, that is, it is readily transported through soil and into groundwater where it can travel long distances, and persistent, meaning that it does not easily degrade in the environment and cannot be easily removed by conventional drinking water treatment systems. The U.S. Environmental Protection Agency classifies dioxane as a likely human carcinogen.

No federal or state agency has approved dioxane as an additive to drinking water in any amount, nor has any federal or state agency approved of releasing dioxane into groundwater in any amount. The New York State Department of Health regulates dioxane as an “unspecified organic contaminant” under a generic maximum contaminant level (“MCL”) of 50 parts per billion (“ppb”). None of the plaintiffs’ wells in these cases have exceeded this generic standard. There have been, however, recent changes regarding the state’s regulation of the chemical. State legislation passed in 2017 requires all New York-based water systems to test for dioxane. In 2017, Governor Cuomo created a new Drinking Water Quality Control Council (the “Council”). On December 18, 2018, the Council recommended an MCL of 1 ppb for dioxane.

C. The Defendants

Defendants are manufacturers and promoters of dioxane and industrial products containing dioxane. Plaintiffs allege that the actions or inaction of the defendants caused the contamination of their wells.

Dow and Ferro were the primary manufacturers of dioxane in the United States. In addition to being the market leader in dioxane production, Dow owned and licensed the technology for dioxane stabilization of TCA, and it was the market leader in TCA production as well. Defendant Vulcan licensed the dioxane stabilization process from Dow and produced dioxane-stabilized TCA.

Plaintiffs allege that defendants knew, or should have known, that dioxane is toxic to humans and that, when products containing dioxane are disposed of onto land, its chemical properties allow it to mix easily with groundwater, rendering drinking water unsafe and requiring significant expense to remove it from public drinking water wells. Plaintiffs further allege that defendants are among the nation's most sophisticated and technically advanced companies in areas including chemistry, analytical chemistry, organic chemistry, and methods of subsurface investigation, and that their own research establishes their knowledge of these characteristics of dioxane. Indeed since the 1940s, the process by which groundwater becomes contaminated from persistent organic compounds, including dioxane, has been described in technical literature which the defendants were, or should have been, familiar with.

The complaints allege that defendants knew that the primary use of their product, vapor degreasing, concentrates dioxane in the waste stream. This is because dioxane boils at a higher temperature than TCA. During the vapor degreasing process, while TCA is lost to the atmosphere, a high proportion of dioxane remains in liquid form. Because of this, waste TCA removed from

vapor degreases generally included high concentrations of dioxane with significant potential to contaminate large volumes of groundwater. Plaintiffs allege that it was foreseeable to defendants that such waste water would often be disposed of onto land where it would migrate into groundwater.

The complaints also allege that defendants knew, or should have known, that routine solvent handling, use, and disposal practices led to the routine and substantial release of dioxane-containing products into the environment. Users of TCA produced by defendants routinely disposed of waste solvents by pouring them onto the ground or into trenches for evaporation or burning.

Plaintiffs also allege that solvent use and recovery systems, by design, produced wastewater with high concentrations of dioxane, and routinely malfunctioned, releasing solvents containing dioxane to surface and groundwater. They claim that defendants were aware of these practices and risks. Indeed, the complaints allege that defendants routinely advised users of chlorinated solvents, including TCA, to dispose of waste solvents by pouring them onto the ground or into trenches for evaporation and burning. During the height of TCA use in the 1960s through the 1990s, these practices resulted in significant soil and groundwater contamination from metals fabrication and other industrial solvent release sites.

The complaints further allege that defendants knew, or should have known, that the routine use and disposal of septic tank and drain cleaners containing TCA would result in the release of dioxane into groundwater. Such cleaners were widely used between 1960 and 1980. A leading brand, Drainz, was manufactured by a company with operations in Suffolk County, New York. Defendants knew, or should have known, that this application of their TCA products would result in dioxane being released into groundwater through septic tank leaking or sewer exfiltration.

Finally, the complaints allege that, despite knowing, or having reason to know, that long-term groundwater contamination and pollution of water wells would result from the foreseeable uses of their products without proper precautionary measures, including adequate warnings, defendants nevertheless promoted, marketed, and/or sold such products in the vicinity of the plaintiffs' wells and elsewhere without providing such warnings. Moreover, defendants developed and generally knew of feasible alternative stabilizers to obviate the use of dioxane to stabilize TCA, and defendants manufactured or were aware of alternative solvents that would have eliminated the use of TCA stabilized by dioxane. Yet, despite knowing, or having reason to know, of dioxane's toxicity and its ability to contaminate groundwater, and despite the existence of feasible alternative designs not containing dioxane, defendants manufactured, promoted, marketed, and/or sold TCA containing dioxane that was used in the vicinity of the plaintiffs' wells.

It is these allegations that are the basis for plaintiffs' claim that defendants' actions caused injury to their water supply.

II. Procedural History

This motion to dismiss applies to 24 out of 27 related cases. One of the three cases not subject to this motion is the first-filed action, *Suffolk County Water Authority v. The Dow Chemical Company, et al.*, 17-cv-6980 ("SCWA"), which was already subject to a motion to dismiss, and includes two additional defendants, the Procter & Gamble Company ("P&G") and Shell Oil Company ("Shell").² The Honorable Joseph F. Bianco, then district, now circuit, judge, to whom that case was previously assigned, in an oral decision dated December 13, 2018, denied the defendants' joint motion to dismiss on each claim except for a private nuisance claim. The 24

² P&G and Shell are also defendants in the two other cases not subject to this motion to dismiss.

complaints at issue now do not include the private nuisance claim that he dismissed, and P&G and Shell have not been named as defendants in any of the 24 actions.

III. Legal Standard

Under Rule 12(b)(6), the court must accept as true all well-pleaded factual allegations and must draw all inferences in the plaintiff's favor. *Swiatkowski v. Citibank*, 446 Fed. Appx. 360, 360–61 (2d Cir. 2011). To survive a motion to dismiss, a complaint must contain sufficient factual matter to “state a claim to relief that is plausible on its face.” *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (quoting *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007)). Facial plausibility exists when a plaintiff “pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged.” *Id.*

IV. Discussion

A. Substantial Factor Causation

The parties dispute whether the complaints have adequately alleged substantial factor causation. Under the substantial factor causation test, which has been adopted in New York, “an act or omission is regarded as a legal cause of an injury ‘if it was a substantial factor in bringing about the injury.’” *In re Methyl Tertiary Butyl Ether (“MTBE”) Prod. Liab. Litig.*, 725 F.3d 65, 116 (2d Cir. 2013) (quoting *Schneider v. Diallo*, 14 A.D.3d 445, 788 (1st Dep’t 2005)). This test recognizes “that often many acts can be said to have caused a particular injury, and requires only that defendant’s actions be a substantial factor in producing the injury.” *In re Methyl Tertiary Butyl Ether (“MTBE”) Prod. Liab. Litig.*, 591 F. Supp. 2d 259, 266 (S.D.N.Y. 2008). In applying this standard, “[t]he word ‘substantial’ means that the act or omission ‘had such an effect in producing the injury that reasonable people would regard it as a cause of the injury.’” *MTBE*, 725 F.3d at 116 (quoting *Rojas v. City of New York*, 208 A.D.2d 416, 617 (1st Dep’t 1994)). Causation

in groundwater cases is generally a question for the finder of fact. *Hicksville Water Dist. v. Philips Elecs. N. Am. Corp.*, 2018 WL 1542670, at *6 (E.D.N.Y. Mar. 29, 2018).

In the first-filed, *SCWA* case, Judge Bianco rejected defendants' argument that causation had not been pled. He held:

for purposes of the pleading, certainly the plaintiff[] [has] alleged that each of the defendants manufactured, marketed, and promoted the [dioxane] product and that it was a substantial factor in contaminating the Suffolk County Water Authority's wells. . . . [T]here's more than sufficient allegations for purposes of pleading and surviving a motion to dismiss on the issue of causation.

Motion to Dismiss ("MTD") Transcript, December 13, 2018, at 6–7. In the complaints at issue here, plaintiffs have set forth nearly identical allegations regarding causation as the plaintiff in the *SCWA* case did. These allegations include: that defendants marketed, sold, or distributed their products in the region of plaintiffs' wells; that Dow and Ferro were the primary manufacturers of dioxane, and that Vulcan licensed the technology for stabilizing TCA with dioxane from Dow and produced dioxane-stabilized TCA; that defendants knew, or should have known, that routine use of their products would inevitably lead to the release of dioxane into the environment, causing long-term groundwater contamination and pollution of water wells, yet defendants nonetheless manufactured, promoted, marketed, and/or sold TCA containing dioxane that was used in the vicinity of the plaintiffs' wells; and that defendants advised users of TCA to dispose of waste solvents by pouring them onto the ground or into trenches for evaporation and burning.

Defendants, however, note that, unlike the first-filed complaint, the post-*SCWA* complaints additionally allege that:

1,4-dioxane is fungible: 1,4-dioxane made and/or used by one Defendant is chemically identical to 1,4-dioxane made and/or used by any other Defendant. Using currently accepted scientific methods, it is impossible, based on the chemical's physical characteristics, to identify the manufacturer of the 1,4-dioxane or the product containing the 1,4-dioxane.

And that:

Once released into the environment, 1,4-dioxane lacks characteristics or a chemical signature that would enable identification of the specific company that manufactured the product, based on any physical characteristics. Even when it is possible to identify a source of a plume of 1,4-dioxane, it is impossible, based on any physical characteristics, to identify what portions of commingled 1,4-dioxane was manufactured or supplied by any particular Defendant.

Defendants argue that this fungibility, and the plaintiffs' consequent inability to physically trace a particular dioxane molecule to a particular defendant, prevent plaintiffs from being able to properly plead causation. Plaintiffs respond that these paragraphs do not constitute an admission that it is impossible to identify the manufacturer of the dioxane in their wells, such that causation cannot be established, but rather a recognition that each defendant's contribution to the commingled plumes contaminating the plaintiffs' wells likely cannot be established from physical analysis alone. They contend that they will use multiple lines of evidence, including evidence of each of the defendant's market share, to establish that defendants' conduct was a substantial factor in causing the harm.

I agree that it would be unreasonable to view these allegations as an admission that plaintiffs cannot prove substantial factor causation. And, defendants provide no authority for the proposition that the fungibility of chemical molecules makes it impossible to prove, let alone plead, causation in a groundwater case alleging manufacturer liability. Indeed, in *MTBE*, a groundwater case where the contaminant in question, MTBE, was also fungible, the plaintiff successfully proved direct, substantial factor causation at trial without tracing individual MTBE molecules back to the manufacturer defendant, Exxon. The Second Circuit affirmed the jury's finding on causation, stating that the plaintiff "identified the 'exact defendant whose product injured' it," and that "a reasonable jury could conclude that Exxon's conduct as a manufacturer, refiner, supplier, or seller of gasoline containing MTBE was indeed a substantial factor in bringing about the City's

injury.” *MTBE*, 725 F.3d at 116–117. The Second Circuit also found that the district court’s jury instruction, which allowed the jury to consider market share data as “part of the mosaic of circumstantial evidence that helps the jury determine the scope of the defendant’s contribution to the plaintiff’s injury,” was not improper. *Id.* at 117. In light of the Second Circuit’s ruling in *MTBE*, I cannot conclude that the addition of these two fungibility paragraphs makes the complaints deficient as a matter of law. I therefore find, for substantially the same reasons as Judge Bianco found, that the complaints’ allegations are sufficient on the issue of substantial factor causation.

Defendants’ arguments as to why the cases before me are unlike the *MTBE* case that went to trial are unpersuasive. It is entirely unsurprising that these cases, which allege groundwater contamination from a synthetic industrial chemical, are not factually identical to a groundwater case involving a gasoline additive. But the relevant principle of the Second Circuit’s *MTBE* decision—that direct, substantial factor causation can be proven in a groundwater contamination case asserting manufacturer liability resulting from a fungible contaminant—applies all the same. *Id.* at 116–117. Whether plaintiffs ultimately will be able to prove that defendants’ products are in their wells, despite the asserted factual differences between these cases and *MTBE*, requires an evaluation of the evidence and can be resolved only on summary judgment or at trial.

Finally, defendants reference the actions of certain unnamed third parties in contributing to plaintiffs’ harm.³ But, if plaintiffs can prove that each defendant’s actions were a substantial factor in bringing about the harm, that non-parties may have contributed to the harm does not necessarily undermine the defendants’ liability. Nor would an intervening act of a third party

³ Plaintiffs do not allege, as defendants claim, that the three defendants named in these actions are “exclusively responsible for the contamination of the Plaintiffs’ wells.” Defs.’ Reply at 2.

break the causal chain if it is the “normal or foreseeable consequence of the situation created by the defendant’s negligence.” *Charney v. Wilkov*, 734 F. App’x 6, 10 (2d Cir. 2018) (internal quotation marks omitted). And, “[w]hether a superseding cause exists and whether it was foreseeable is ordinarily decided by the factfinder.” *Johnson v. Bryco Arms*, 304 F. Supp. 2d 383, 395 (E.D.N.Y. 2004); *see* MTD Transcript, December 13, 2018, at 7 (“Whether or not . . . any mishandling or improper disposal of the products by end users is sufficient to overcome or to defeat the allegations of causation can’t again be decided at the motion to dismiss. That’s a fact-intensive question.”). Here, the complaints allege that defendants knew, or should have known, that dioxane contamination was a foreseeable consequence of the intended use of their products. There is no basis to grant defendants’ motion based upon the actions of unnamed third parties.

In sum, defendants have failed to persuade me that plaintiffs’ new allegations regarding dioxane’s fungibility require the dismissal of these actions. As the plaintiffs in these cases have otherwise sufficiently alleged causation, defendants’ motion to dismiss on causation grounds is denied.

B. Alternative Theories of Liability

In addition to arguing that the facts alleged in the complaints do not plausibly allege substantial factor causation, the defendants also argue that the complaints fail to plead sufficient facts to justify alternative theories of liability, such as market share liability, commingled products liability, and concurrent cause liability. “In limited circumstances, courts permit alternative theories of liability where traditional principles of causation do not establish liability in order to protect the interests of plaintiffs and properly apportion liability among defendants.” *In re Methyl Tertiary Butyl Ether (“MTBE”) Prod. Liab. Litig.*, 739 F. Supp. 2d 576, 597 (S.D.N.Y. 2010).

Defendants raised similar arguments in their motion to dismiss in the first-filed case. There, Judge Bianco, after finding that the plaintiff successfully pleaded substantial factor causation, held that “the Court need not address those [alternative theories] at this juncture,” and that the plaintiff “obviously can attempt to prove [causation] through any of the theories but the Court will look at any of those issues at summary judgment.” MTD Transcript, December 13, 2018, at 7–8.

I find Judge Bianco’s decision to defer ruling on the alternative theories of liability prudent. Defendants have provided no rationale for dismissing such theories where, as here, the plaintiffs have successfully pleaded direct, substantial factor causation, and the viability of the complaints does not depend on an alternative theory of liability.⁴ *See also In re Methyl Tertiary Butyl Ether (“MTBE”) Prod. Liab. Litig.*, 447 F. Supp. 2d 289, 305 (S.D.N.Y. 2006) (noting that the applicability of such theories is generally better reserved for summary judgment or trial due to the fact intensive nature of the inquiry).⁵

⁴ Defendants have cited only one case where a court dismissed an alternative liability theory on a motion to dismiss, *S.F. v. Archer-Daniels-Midland Co.*, 2014 WL 1600414, at *1 (W.D.N.Y. Apr. 21, 2014), *aff’d*, 594 F. App’x 11 (2d Cir. 2014) (summary order), but the facts of that case confirm that I need not do so here. Because, unlike here, the viability of the complaint depended on the plaintiff proceeding under the market share theory, *id.* at *5–6, it was necessary for the *S.F.* court to reach that issue.

⁵ In this decision, the trial court in *MTBE*, on plaintiffs’ application (which the court treated as a motion for summary judgment), did find that the plaintiffs could not proceed under a concurrent cause theory, but did so because it would have been “fundamentally unfair” to hold approximately 50 defendants who participated in the national gasoline market jointly and severally liable, as it was likely that “each defendant’s contribution to the total volume of MTBE-containing gasoline in any particular well was very small.” *MTBE*, 447 F. Supp. 2d at 302–303. The cases before me, in contrast, are only at the motion to dismiss stage, and there are only three defendants, each one of which is alleged to be a substantial producer of dioxane or products containing dioxane. Accordingly, the *MTBE* trial court’s fairness concern does not provide a basis for dismissing the concurrent cause theory at this time.

In sum, because the plaintiffs have properly pleaded facts supporting direct, substantial factor causation, there is no need to determine now whether they may also proceed under any alternative theory of liability. Defendants' motion to dismiss the alternative theories of liability is denied.

V. Conclusion

For the reasons set forth above, defendants' joint motion to dismiss 24 of the complaints in these related cases is denied in its entirety.

SO ORDERED.

/s/
NINA GERSHON
United States District Judge

June 4, 2020
Brooklyn, New York